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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/481,477	01/11/2000	GEORGE G. GELFER	P99.2547	5685

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EXAMINER	
VIG, NARESH	
ART UNIT	**PAPER NUMBER**
3629	

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/481,477	GELFER, GEORGE G.	
	Examiner	Art Unit	
	Naresh Vig	3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 December 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-40 and 42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9-40 and 42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This is in reference to response received on 27 December 2004 to the office action mailed on 30 September 2004 and office action mailed 28 September 2005. There are 40 claims, claims 1 – 7, 9 – 40 and 42 pending for examination.

Response to Arguments

Applicant's argument are responded to rewritten response to pending claims in the application.

In response to applicant's argument that there is no teaching in the LoBiondo et al reference to conduct any type of check at the order-filling facility of the incoming order as to its authenticity, nor any other characteristic thereof. Orders are filled at the order-filling facility in the LoBiondo reference with no not teach questions being asked. However, LoBiondo in view of Frogger and Barnes teaches identifying, based on said identification code, an entity which has placed said ordering message [Barnes, col. 3, lines 2 – 54]. Also, devices placing orders for services have been known to one of ordinary skill in the art at the time of invention. For example, IBM implemented in AS/400 mid-range computers an automatic service call capability which placed a

service call to the support center when it detected need for service, which was fulfilled by IBM (there has to be some identification data in the service call for the service center to authenticate the call and identify which device needed the service).

In response to applicant's argument that in cited reference Barnes et al method and system, the customer places an order only after already being provided with this (possibly limited) catalog list, but once the customer is presented with the customer list that is suitable for that customer, the customer is free to order any item on that catalog list. However, in applicant's invention order can only be placed for predetermined list (list of consumables used by the applicant's invention).

In response to applicant's argument that Independent claim 1 has been amended to make clear that such back-and forth communication is precluded in the method of claim 1, by stating that the ordering message is communicated from the device to the data center only thereafter establishing a communication between the device and the data center has been responded to in response to the claim.

In response to applicant's argument that Independent claim 27 also has been amended to clarify the operation of the control unit in the event that an ordering message is determined, at a remote data center, not to be authentic has been responded in response to the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 – 7, 9, 10, 13 – 18, 21 – 36, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over LoBiondo et al. US Patent 5,305,199 hereinafter known as LoBiondo in view of Barnes et al. US Patent 5,970,475 hereinafter known as Barnes.

Regarding claims 1 and 27, LoBiondo teaches a reprographic machine 10, such as an electrophotographic machine, an ink jet printer, etc. for producing hard copies of documents by applying marking materials, such as electrostatic toners or inks, to recording media, such as paper sheets [Fig. 1 and disclosure associated with Fig. 1]. LoBiondo teaches automatically ordering a supply item which is consumed during operation of a device (Automatic or semi-automatic ordering can be provided via a remote interactive communication system; The reprographic machine 10 is provided with a remote communication capability, for example, via a remote interactive communication (RIC) system, so that information to and from a remote supplies ordering location can be effected) [abstract, col. 3, line 16 - 46]. LoBiondo teaches:

monitoring a consumption quantity associated with consumption of a supply item (e.g.ink) during operation of a device and repeatedly comparing said consumption quantity to a threshold representing consumption of said supply item before complete depletion of said supply item [Fig. 7 and disclosure associated with Fig. 7, col. 2, lines 54 – 59];

LoBiondo does not teach electronically monitoring, in a device, a consumption quantity associated with consumption of a supply item during operation of said device and repeatedly electronically comparing said consumption quantity to a threshold. However, Frogger teaches system and method for electronically monitoring, in a device (ink cartridge), a consumption quantity associated with consumption of a supply item during operation of said device and repeatedly electronically comparing said consumption quantity to a threshold [col. 1, lines 6 – 27].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LoBiondo as taught by Frogger and electronically monitor consumption of supply item to modify the device to continuously monitor the level of supply in a device without operator intervention. For example, inkjet printers monitoring ink level, and commercially available at the time of invention, ink tank determines level of ink, and device displays the message [e.g. Frogger, col. 8, lines 49 – 54];

LoBiondo in view of Frogger teaches:

upon said consumption quantity reaching said threshold automatically generating an ordering message at said device representing an order for a requested supply item,

and including an identification code in said ordering message, and only thereafter establishing a communication between said device and a data center and communicating said ordering message from said device to said data center (LoBiondo, Through remote interactive communication capabilities, the system can automatically submit orders for supplies); [LoBiondo, col. 5, lines 5 – 7];

upon said consumption quantity reaching said threshold automatically generating an ordering message at said device representing an order for a requested supply item (reorder message to alert the operator that reorder is necessary) [LoBiondo, col. 4, line 23], and including an identification code in said ordering message (would be obvious to one of ordinary skill in the art to include the identification code to identify the product, identify the device etc.), and only thereafter establishing a communication between said device and a data center and communicating said ordering message from said device to said data center (obvious to one of ordinary skill in the art to communicate message after the message is generated);

LoBiondo in view of Frogger does not teach identifying, based on said identification code, an entity which has placed said ordering message. However, Barnes teaches identifying, based on said identification code, an entity which has placed said ordering message [Barnes, col. 3, lines 2 – 54];

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LoBiondo in view of Frogger as taught by Barnes to electronically transact for the purchase and supply of goods/services.

LoBiondo in view of Frogger does not teach compiling a data bank containing respective identification codes for a plurality of different ordering entities, each ordering entity having at least one permissible supply item associated therewith, However Barnes teaches compiling a data bank containing respective identification codes for a plurality of different ordering entities, each ordering entity having at least one permissible supply item associated therewith [col. 1, lines 9 – 13];

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LoBiondo in view of Frogger as taught by Barnes to electronically transact for the purchase and supply of goods/services.

upon receipt of said ordering message at said data center, conducting an ordering routine at said data center including searching said data bank to find the ordering entity associated with the identification code in the ordering message and filling said order only with a supply item conforming to said at least one permissible supply item, However, Barnes teaches upon receipt of said ordering message at said data center, conducting an ordering routine at said data center including searching said data bank to find the ordering entity associated with the identification code in the ordering message and filling said order only with a supply item conforming to said at least one permissible supply item [col. 4, lines 21 – 26].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LoBiondo in view of Frogger as taught by Barnes to prevent abuses from within the organization.

Regarding claims 2 and 28, LoBiondo in view of Frogger and Barnes teaches selecting said predetermined consumption quantity from the group consisting of a time quantity, a physical quantity, a monetary quantity and an accounting quantity, dependent on said supply item [col. 4, lines 29 – 39].

Regarding claims 3 and 29, LoBiondo in view of Frogger and Barnes teaches consumption quantity is an item count and wherein the step of monitoring said predetermined consumption quantity and repeatedly comparing said consumption quantity to a threshold comprises incrementing said item count as said supply item is consumed, and comparing said item count to a predetermined counter reading as said threshold (determine inventory on hand). LoBiondo in view of Frogger teaches to determine inventory on hand [col. 4, lines 1 – 4].

Regarding claim 4, LoBiondo in view of Frogger and Barnes teaches device comprises a printing device (reprographic machine such a inkjet printer, business choice to elect what type of printer to use e.g. impact printer, dot matrix, laser, inkjet) and wherein said supply item comprises an inking ribbon cassette (ink for inkjet printer, toner for laser printer, ribbon for dot matrix printer etc.) used during printing in said device [col. 2, lines 11 – 24], and wherein the step of incrementing said item count comprises incrementing said item count upon each imprint which is made on said inking ribbon cassette, and wherein said predetermined counter reading comprises a number of said imprints which is less than a total number of imprints accommodated by said

inking ribbon cassette (design choice whether the ribbon in one time use only (IBM typewriter had this kind of ribbon, or, use the ribbon until the ink fades like in Epson dot matrix printers) [col. 4, lines 1 – 4].

Regarding claim 5, LoBiondo in view of Frogger and Barnes teaches device is a printer device and wherein said supply item comprises ink contained in an ink tank cassette which is used during printing and wherein said item count comprises an amount of said ink from said ink tank which is consumed during each imprint produced by said printer device, and wherein said predetermined counter reading is an ink volume, represented by a plurality of said imprints, which is less than a total volume of ink in said ink tank cassette [col. 4, lines 1 – 4].

Regarding claims 6, 34 and 36, LoBiondo in view of Frogger and Barnes teaches device is a printer device and wherein said supply item is ink contained in an ink tank cassette which is used for printing by said printer device, and wherein the step of monitoring said predetermined consumption quantity and repeatedly comparing said consumption quantity to a threshold comprised disposing electrodes in said ink tank cassette and monitoring a current between said electrodes to identify when said ink in said ink tank cassette falls below a predetermined level, said predetermined level comprising said threshold (monitor ink level in ink tank) [Frogger, Fig. 10 and disclosure associated with Fig. 10].

Regarding claim 7, LoBiondo in view of Frogger and Barnes teaches monitoring a predetermined consumption quantity and repeatedly comparing said predetermined consumption quantity to a threshold comprises monitoring a plurality of different consumption quantities associated with said supply item and repeatedly comparing each of said plurality of predetermined consumption quantities to respective thresholds which are respectively reached before complete depletion of said supply item cassette [col. 4, lines 1 – 4].

Regarding claim 9, LoBiondo in view of Frogger and Barnes teaches an order number in said ordering message, and triggering said ordering routine at said data center dependent on said ordering number [Barnes, abstract].

Regarding claim 10, LoBiondo in view of Froger and Barnes teaches selecting said ordering number from the group consisting of order codes for respectively different supply items and identification numbers for respectively different supply items.

Regarding claims 13 – 16, defining what kind of data is included with the order number, this is considered to be non-functional descriptive material that does not distinguish (define) over the applied prior art. Since the instant claims places an order for replenishing supplies, the type of data claimed is considered to be non-functional descriptive material, the applied prior art satisfies the claim. The prior art places an order for replenishing supplies and is fully capable of including identification number,

serial number, type of supply item and ordered amount, this is the extend to which weight will be given to the claimed data. When descriptive material is not functionally related to the article, the descriptive material will not distinguish the invention from the prior art in terms of patentability, *In re Gulack*, 217 USPQ 401 (CAFC 1983).

Regarding claim 17, LoBiondo in view of Frogger and Barnes does not teach including a checksum in said ordering message. However, Official notice it taken that it would have been obvious to one of ordinary skill in the art at the time the invention was made that in an online communication using modem, checksum is used with the data transmission to ensure that the data received over the transmission line is not corrupted.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LoBiondo in view of Barnes and include checksum to maintain data integrity.

Regarding claims 18 and 31, LoBiondo in view of Frogger and Barnes teaches comprising encrypting said ordering message.

Regarding claim 21, LoBiondo in view of Frogger and Barnes teaches generating a confirmation message at said data center when said order is filled, and transmitting said confirmation message from said data center to said device (Order confirmation can be provided from the reorder site.) [abstract].

Regarding claim 22, LoBiondo in view of Froger and Barnes teaches generating an invoice addressed to said ordering entity at said data center upon filling said order, and transmitting said invoice to said ordering entity [Barnes col. 8, lines 38 – 39].

Regarding claim 23, LoBiondo in view of Froger and Barnes teaches ordering entity maintains an account accessible by said data center, and comprising the additional step of automatically debiting said account at said data center dependent on a price of said supply item upon filling said order [Barnes, Gig. 6A label 88].

Regarding claim 24, LoBiondo in view of Frogger and Barnes teaches automatically generating said ordering message and establishing said communication from said device to said data center in a routine for automatic ordering, and allowing a user of said device to selectively disenable said routine for automatic ordering (automatic or semi-automatic ordering can be provided via a remote interactive communication system) [abstract].

Regarding claim 25, LoBiondo in view of Frogger and Barnes teaches conducting an interrogation routine in said device upon initialization of said device and, within said interrogation routine, allowing for a user input into said device to selectively enable or disenable said routine for automatic ordering (automatic or semi-automatic ordering can be provided via a remote interactive communication system) [abstract].

Regarding claim 26, LoBiondo in view of Frogger and Barnes teaches generating said ordering message and establishing said communication from said device to said data center are conducted in a routine for automatic ordering, and allowing remote disenabling of said routine for automatic ordering by remote switching from said data center in a communication from said data center to said device (automatic or semi-automatic ordering can be provided via a remote interactive communication system) [abstract].

Regarding claim 30, LoBiondo in view of Frogger and Barnes teaches device comprises an input unit for entering said threshold into said control unit, said input unit being selected from the group consisting of a keyboard connected to said control unit, a chip card and chip card reader connected to said control unit, and a modem connected to said control unit and communicable with said remote data center [abstract, Fig. 1].

Regarding claim 32, LoBiondo in view of Frogger and Barnes teaches a display connected to said control unit and an input unit connected to said control unit, said control unit displaying said ordering message on said display before transmitting said ordering message to said remote data center, and said input unit allowing a user to modify said ordering message [abstract, Fig. 1].

Regarding claim 33, LoBiondo in view of Frogger and Barnes teaches keyboard allows suppression of said ordering message so that no ordering message is communicated to said remote data center [abstract].

Regarding claim 35, LoBiondo in view of Frogger and Barnes does not teach printer is a thermal printer and wherein said ink source is a thermal inking ribbon. However, Official notice it taken that it would have been obvious to one of ordinary skill in the art at the time the invention was made that it is a business choice to decide what printer to use.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LoBiondo in view of Barnes and use thermal printer to eliminate the replenishment of ink. For example, computer terminals Texas Instruments Silent Writer with thermal printer.

Regarding claim 39, LoBiondo in view of Frogger, Barnes teaches ink tank cassette containing ink therein at an ink level which changes dependent on the number of imprints made by said ink jet printer, and wherein said means for monitoring consumption comprises a sensor which identifies said ink level and wherein said control unit calculates a number of remaining imprints when said ink level, as sensed by said sensor, reaches a predetermined level [Frogger, col. 1, lines 9 – 12].

Regarding claim 40, LoBiondo in view of Frogger, Barnes teaches sensor comprises electrodes which interact with said ink in said ink tank cassette which supply a signal to said control unit, and further comprising an input unit connected to said control unit allowing input of characteristic information about said ink, and wherein said control unit calculates said number of remaining imprints dependent on said signal from said electrodes and said characteristic information about said ink [Frogger, col. 4, lines 18 – 19].

Claims 11, 12, 19, 20, 37, 38 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over LoBiondo et al. US Patent 5,305,199 hereinafter known as LoBiondo in view of Barnes et al. US Patent 5,970,475 hereinafter known as Barnes and Canon Multipass C5500 hereinafter known as Canon.

Regarding claim 11, LoBiondo in view of Frogger and Barnes does not teach physically attaching an indicator representing said ordering number to said supply item. However, Canon teaches attaching a indicator representing ordering number to supply item [Canon page 1-9, 10-3, 10-7].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify LoBiondo in view of Barnes as taught by Canon to indicate to replenishing authority what items need to be replenished.

Regarding claim 12, LoBiondo in view of Frogger and Barnes and Canon teaches selecting said indicator dependent on a physical state of said supply item (to indicate to replenishing authority what items need to be replenished).

Regarding claim 19, LoBiondo in view of Frogger, Barnes and Canon teaches:

assigning a serial number to said device [Canon page 10-2];

assigning respective, unique order numbers to different supply items [Canon page 1-2];

allocating order numbers for respectively supply items, permissible for use by said device, to the serial number of said device and storing the allocation at said data center [Canon page 1-2];

including said serial number and said ordering number in said communication established from said device to said data center, and encrypting said ordering message (responded to earlier in response to claims 13 – 16 and 18) [Barnes, col. 4, line 23];

upon receipt of said ordering message at said data center, decrypting said ordering message. it is obvious that Barnes decrypts the encrypted massage to authenticate the message (obvious to decrypt the encrypted message prior to using the message); and

at said data center after decrypting said ordering message, checking authenticity of said ordering message using said serial number and using at least a part of said ordering number before filling said order. It is a business choice to elect what data to use to authenticate an order. Therefore, LoBiondo in view of Froger and Barnes teaches

to checking authenticity of said ordering message to determine validity of the order prior to fulfilling the order [Barnes, col. 3, line 51].

Regarding claim 20, LoBiondo in view of Frogger and Barnes and Canon does not explicitly teach group consisting of ordering codes respectively associated with different supply items and identification numbers respectively associated with different supply items.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that business design numbering scheme for ordering products to easily identify products needed to replenish consumed product.

Regarding claim 37, LoBiondo in view of Frogger, Barnes and Canon teaches display connected to said control unit, and wherein said control unit displays a number of remaining imprints on said display each time said device is activated (Canon, page 1 – 20). Official notice it taken that it would have been obvious to one of ordinary skill in the art at the time the invention was made that it is a design choice to elect what information to display on the display.

Regarding claim 38, LoBiondo in view of Frogger, Barnes and Canon teaches control unit displays a number of remaining imprints on said display each time said ink source is replaced (Canon, page 1 – 20). Official notice it taken that it would have been

obvious to one of ordinary skill in the art at the time the invention was made that it is a design choice to elect what information to display on the display.

Regarding claim 42, LoBiondo in view of Frogger, Barnes and Canon teaches a display connected to said control unit, and wherein said control unit displays a message on said display if said ordering message is determined to be non-authentic. Official notice it taken that it would have been obvious to one of ordinary skill in the art at the time the invention was made that it is a design choice to elect what information to display on the display.

Conclusion

Applicant is required under 37 CRF '1.111 (c) to consider the references fully when responding to this office action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naresh Vig whose telephone number is (571) 272-6810. The examiner can normally be reached on M-F 7:30 - 6:00 (Wednesday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (571) 272-6812. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Naresh Vig
Examiner
Art Unit 3629

December 15, 2005